INDEX TO AUTHORS

A

Albrecht, Audra J. See LANGLEY and ALBRECHT, 729

Archibald, R. C. See EVANS, MURPHY, ARCHIBALD, and CORNISH, 515

B

de Beer, Edwin J., Johnston, Charles G., and Wilson, D. Wright. The composition of intestinal secretions, 113

Bell, William P. See TWEEDY, BELL, and VICENS-RIOS, 105

Bender, J. A. See HAYMAN, JOHNSTON, and BENDER, 675

Bills, Charles E., Massengale, O. N., McDonald, Francis G., and Wirick, Alice M. The action of activated ergosterol in the chicken. III. Evidence of the existence of only one provitamin D in crude ergosterol, 323

Blanchard, Kenneth C. The nucleic acid of the eggs of *Arbacia punctulata*, 251

Bloor, W. R. See MATTHEWS, NEWTON, and BLOOR, 145

Blumberg, Harold. A growth deficiency disease, curable by wheat germ oil, 227

Boyd, Eldon M. The relation of lipid composition to physiological activity in the ovaries of pregnant and pseudopregnant rabbits, 607

Bruger, Maurice. The state of cholesterol and the nature of the cholesterol-protein complex in pathological body fluids, 463

Buchanan, Kathryn Sue. See SURE, KIK, and BUCHANAN, 11, 19, 27

Buell, Mary V. The adenine nucleotide content of human blood. I. Determination and content, 273

Burrell, R. C., and Walter, E. D. A saponin from the soy bean, 55

C

Carruthers, Albert. The hydrolysis of glycogen by muscle and liver extracts, 535

— and **Lee, Wei Yung.** The hydrolysis of glycogen by glycerol extract of muscle, 525

Carter, Herbert E. The metabolism of norleucine, isoleucine, and valine. I. The synthesis of some phenyl derivatives, 619

Chaikoff, I. L. See KAPLAN and CHAIKOFF, 201

—. See LARSON and CHAIKOFF, 457

Chambers, William H., Himwich, Harold E., and Kennard, Margaret A. Glucose excretion after exercise in experimental diabetes, 217

Chao, Iping. See ENGEL and CHAO, 389

Cogan, Michael. See ROBINSON, 403

Cornish, R. E. See EVANS, MURPHY, ARCHIBALD, and CORNISH, 515

Craig, Lyman C. See JACOBS and CRAIG, 595

Crescitelli, Frederick, and Taylor, Ivon R. Changes in the concentration of reducing substances during the metamorphosis of *Galleria mellonella* (bee-moth), 349

Curtis, George. See OLMSTED, CURTIS, and TIMM, 645

D

Daft, Floyd Shelton, Robscheit-Robbins, Frieda S., and Whipple, G. H. New formed hemoglobin and protein catabolism in the anemic dog, 487

Davidson, Jehiel, and LeClerc, J. A. A new method for the determination of the acid-base balance in food materials, 337

DeWitt, James. See SURE, KIK, and BUCHANAN, 27

Duncan, C. W., Huffman, C. F., and Robinson, C. S. Magnesium studies in calves. I. Tetany produced by a ration of milk or milk with various supplements, 35

Dyer, Helen M., and du Vigneaud, Vincent. A study of the physiological availability of pentocystine and of homomethionine, 73

E

Elderfield, Robert C. See JACOBS and ELDERFIELD, 497, 693

Elvehjem, C. A., and Koehn, C. J., Jr. Studies on vitamin B_2 (G). The non-identity of vitamin B_2 and flavins, 709

Engel, George L., and Chao, Iping. Comparative distribution of organic phosphates in the skeletal and cardiac muscles of *Limulus polyphemus*, 389

Evans, E. A., Jr. See JENSEN and EVANS, 1

Evans, Herbert M., and Lepkovsky, Samuel. The sparing action of fat on vitamin B. VIII. On the loss of vitamin B from the rat's tissues, 439

—, **Murphy, Elizabeth A., Archibald, R. C., and Cornish, R. E.** Preparation and properties of vitamin E concentrates, 515

—. See LEPKOVSKY, OUER, and EVANS, 431

—. See LEPKOVSKY, POPPER, and EVANS, 257

F

Falk, K. George, and McGuire, Grace. Studies on enzyme action. XLIX. The lipase actions of tissues of rachitic rats, 61

Freeman, S., and Friedemann, Theodore E. A micromethod for the estimation of the fat-soluble ester glycerol contained in lymph, 471

Friedemann, Theodore E. See FREEMAN and FRIEDEMANN, 471

G

Garavelli, Louise A. See LAUG and NASH, 479

Goldfarb, Abraham R. See SOBEL, GOLDFARB, and KRAMER, 395

Grant, R. Lorimer, and Lewis, Howard B. Some products of partial hydrolysis of silk fibroin, 667

H

Hand, David B. The refractivity of protein solutions, 703

Hastings, A. Baird. See McLEAN and HASTINGS, 285

Hathaway, Milicent L., and Koch, F. C. Provitamin D potencies, absorption spectra, and chemical properties of heat-treated cholesterol, 773

Hauge, Sigfred M. Evidence of enzymatic destruction of the vitamin A value of alfalfa during the curing process, 331

Hayman, J. M., Jr., Johnston, S. M., and Bender, J. A. On the presence of creatinine in blood, 675

Herrin, R. C. Chemical changes in blood and intestinal juice produced by the loss of intestinal juice, 547

Hess, W. C., and Sullivan, M. X. The determination of cystine and cysteine in butyl alcohol extracts, 195

Himwich, Harold E. See CHAMBERS, HIMWICH, and KENNARD, 217

Howell, Stacey F. See SUMNER and HOWELL, 51

Huffman, C. F. See DUNCAN, HUFFMAN, and ROBINSON, 35

Hughes, J. S. See ROEPKE and HUGHES, 79

Hughes, R. H., and Wimmer, E. J. The absorption of soluble, volatile fatty acids, 141

I

Itter, Stuart, Orent, Elsa R., and McCollum, E. V. An effective method of extracting vitamin B, 571

—, —, and —. A simplified method for preparing lactoflavin and a study of its growth effect, 579

—, —, and —. The possible rôle of the sulfhydryl group in vitamin B_2 deficiency, 585

J

Jacobs, Walter A., and Craig, Lyman C. The ergot alkaloids. IV. The cleavage of ergotinine with sodium and butyl alcohol, 595

— and **Elderfield, Robert C.** Strophanthin. XXXII. The anhydrostrophanthidins, 693

— and —. The structure of the cardiac aglucones, 497

Jensen, H., and Evans, E. A., Jr. Studies on crystalline insulin. XVIII. The nature of the free amino groups in insulin and the isolation of phenylalanine and proline from crystalline insulin, 1

Johnson, Ralph. See ROBINSON, 403

Johnston, Charles G. See DE BEER, JOHNSTON, and WILSON, 113

Johnston, S. M. See HAYMAN, JOHNSTON, and BENDER, 675

K

Kaplan, A., and **Chaikoff, I. L.** Liver lipids in completely depancreatized dogs maintained with insulin, 201

Kennard, Margaret A. See CHAMBERS, HIMWICH, and KENNARD, 217

Kertesz, Z. I. The determination of glucuronic and galacturonic acids by Bertrand's method, 127

Kik, M. C. See SURE, KIK, and BUCHANAN, 11, 19, 27

King, C. G. See WEBER and KING, 131

Kirsh, David. Factors influencing the activity of fungus lipase, 421

Kleiner, Israel S. See TAUBER and KLEINER, 563

Koch, F. C. See HATHAWAY and KOCH, 773

Koehn, C. J., Jr. See ELVEHJEM and KOEHN, 709

Kramer, Benjamin. See SOBEL, GOLDFARB, and KRAMER, 395

L

Landauer, Walter, Upham, Elizabeth, and **Rubin, Fay.** Studies on the creeper fowl. VIII. The effect of bone extract on skeletal growth and the phosphatase content of the bones, 121

Langley, Wilson D., and **Albrecht, Audra J.** The identification of the flavianates of various organic bases, 729

Larson, P. S., and **Chaikoff, I. L.** The effect of insulin on the excretion of allantoin by the normal dog, 457

Laug, Edwin P., and **Nash, Thomas P., Jr.** Some observations on the nature of the reducing substances in normal dog urine, 479

LeClerc, J. A. See DAVIDSON and LECLERC, 337

Lee, Milton. See SCHAFFER and LEE, 355

Lee, Wei Yung. See CARRUTHERS and LEE, 525

Lepkovsky, Samuel, Ouer, Roy A., and **Evans, Herbert M.** The nutritive value of the fatty acids of lard and some of their esters, 431

—, **Popper, William, Jr.,** and **Evans, Herbert M.** The concentration of vitamin G by adsorption and elution from fullers' earth, 257

—. See EVANS and LEPKOVSKY, 439

Levene, P. A. Note on the preparation of crystalline *d*-mannose and of crystalline *d*-ribose, 419

— and **Marker, R. E.** Hydrocarbons derived from methylphenyl- and ethylphenylacetic acids, 409

Lewis, Howard B. See GRANT and LEWIS, 667

Link, Karl Paul. See MORELL and LINK, 763

M

Mackinney, G. Properties of carotenes from certain roots and leaves at various stages of development, 45

Marker, R. E. See LEVENE and MARKER, 409

Massengale, O. N. See BILLS, MASSENGALE, MCDONALD, and WIRICK, 323

Matthews, Vida J., Newton, Joseph K., and Bloor, W. R. The lipids of the skin in experimental diabetes, 145

McCollum, E. V. See ITTER, ORENT, and MCCOLLUM, 571, 579, 585

McDonald, Francis G. See BILLS, MASSENGALE, MCDONALD, and WIRICK, 323

McGuire, Grace. See FALK and MCGUIRE, 61

McLean, Franklin C., and Hastings, A. Baird. The state of calcium in the fluids of the body. I. The conditions affecting the ionization of calcium, 285

Morell, Sam, and Link, Karl Paul. Derivatives of *d*-galacturonic acid. I. Esterification and acylation of *d*-galacturonic acid, 763

Morgan, Agnes Fay, and Samisch, Zdenka. The sequence and extent of tissue changes resulting from moderate doses of viosterol and parathyroid extract, 741

Murlin, John R. See PIERCE, NASSET, and MURLIN, 239

Murphy, Elizabeth A. See EVANS, MURPHY, ARCHIBALD, and CORNISH, 515

N

Nash, Thomas P., Jr. See LAUG and NASH, 479

Nasset, E. S. See PIERCE, NASSET, and MURLIN, 239

Newton, Joseph K. See MATTHEWS, NEWTON, and BLOOR, 145

Norris, Earl R., and Rao, D. A. R. Rama. Phosphatases of marine invertebrates, 783

O

Oberst, Fred W. The determination of sodium in human red blood cells, 153

Olmsted, W. H., Curtis, George, and Timm, O. K. Stool volatile fatty acids. IV. The influence of feeding bran pentosan and fiber to man, 645

—. See WILLIAMS and OLMSTED 653

Orent, Elsa R. See ITTER, ORENT, and MCCOLLUM, 571, 579, 585

Ouer, Roy A. See LEPKOVSKY, OUER, and EVANS, 431

P

Patton, A. R. The determination of glycine in proteins, 267

Pierce, H. B., Nasset, E. S., and Murlin, John R. Enzyme production in a transplanted loop of the upper jejunum, 239

Popper, William, Jr. See LEPKOVSKY, POPPER, and EVANS, 257

R

Rao, D. A. R. Rama. See Norris and Rao, 783

Robinson, C. S. The hydrogen ion concentration of the contents of the small intestine, 403

—. See Duncan, Huffman, and Robinson, 35

Robscheit-Robbins, Frieda S. See Daft, Robscheit-Robbins, and Whipple, 487

Roepke, R. R., and **Hughes, J. S.** Phosphorus partition in the blood serum of laying hens, 79

Rubin, Fay. See Landauer, Upham, and Rubin, 121

S

Samisch, Zdenka. See Morgan and Samisch, 741

Schaffer, Norwood K., and **Lee, Milton.** The effect of the anterior pituitary growth hormone on protein metabolism, 355

Schmidt, Carl L. A. See Zittle and Schmidt, 161

Shapiro, Inez. Studies on ketosis. V. The comparative glycogenic and ketolytic action of glucose and some carbohydrate intermediates, 373

Sifferd, Robert H., and **du Vigneaud, Vincent.** A new synthesis of carnosine, with some observations on the splitting of the benzyl group from carbobenzoxy derivatives and from benzylthio ethers, 753

Smith, Elizabeth R. B. The effect of variations in ionic strength on the apparent isoelectric point of egg albumin, 187

Sobel, Albert E., Goldfarb, Abraham R., and **Kramer, Benjamin.** Studies of incurable rickets. II. Rôle of the "local factor" and of viosterol in the pathogenesis of rickets due to beryllium, 395

Sullivan, M. X. See Hess and Sullivan, 195

Sumner, James B., and **Howell, Stacey F.** A method for determination of saccharase activity, 51

Sure, Barnett, Kik, M. C., and **Buchanan, Kathryn Sue.** Enzymatic efficiency in avitaminosis. I. Influence of vitamin B deficiency on tryptic and ereptic digestion of casein, 19

—, —, and —. II. Influence of vitamin B deficiency on efficiency of pancreatic lipase and esterase, 27

—, —, and —. Technique for the study of tryptic-ereptic digestion of proteins, 11

T

Tauber, Henry, and **Kleiner, Israel S.** A method for the quantitative determination of ascorbic acid (vitamin C). The vitamin C content of various plant and animal tissues, 563

Taylor, Ivon R. See Crescitelli and Taylor, 349

Tennant, Robert. See THOMPSON, TENNANT, and WIES, 85

Thompson, William R., Tennant, Robert, and **Wies, Carl H.** Studies in starch amylase viscosimetry. I. A sensitive precision method for the estimation of amylolytic activity applicable to human serum, 85

Timm, O. K. See OLMSTED, CURTIS, and TIMM, 645

Tweedy, Wilbur R., Bell, William P., and **Vicens-Rios, Christobal.** Further chemical studies on a parathyroid hormone, 105

U

Upham, Elizabeth. See LANDAUER, UPHAM, and RUBIN, 121

V

Vicens-Rios, Christobal. See TWEEDY, BELL, and VICENS-RIOS, 105

du Vigneaud, Vincent. See DYER and DU VIGNEAUD, 73

—. See SIFFERD and DU VIGNEAUD, 753

W

Walter, E. D. See BURRELL and WALTER, 55

Weber, H. H. R., and **King, C. G.** Specificity and inhibition characteristics of liver esterase and pancreas lipase, 131

Whipple, G. H. See DAFT, ROBSCHEIT-ROBBINS, and WHIPPLE, 487

Whitehorn, John C. A chemical method for estimating epinephrine in blood, 633

Wies, Carl H. See THOMPSON, TENNANT, and WIES, 85

Williams, Ray D., and **Olmsted, W. H.** A biochemical method for determining indigestible residue (crude fiber) in feces: lignin, cellulose, and non-water-soluble hemicelluloses, 653

Wilson, D. Wright. See DE BEER, JOHNSTON, and WILSON, 113

Wimmer, E. J. See HUGHES and WIMMER, 141

Wirick, Alice M. See BILLS, MASSENGALE, MCDONALD, and WIRICK, 323

Z

Zittle, Charles A., and **Schmidt, Carl L. A.** Heats of solution, heats of dilution, and specific heats of aqueous solutions of certain amino acids, 161

INDEX TO SUBJECTS

A

Acetic acids: Methylphenyl- and ethylphenyl-, hydrocarbons derived from (LEVENE and MARKER) 409

Acid-base equilibrium: Food, determination (DAVIDSON and LECLERC) 337

Adenine: Nucleotide, blood (BUELL) 273

Aglucones: Cardiac, chemical constitution (JACOBS and ELDERFIELD) 497

Albumin: Egg, isoelectric point, apparent, ionic strength effect (SMITH) 187

Alfalfa: Vitamin A destruction, enzymatic, curing process (HAUGE) 331

Alkaloids: Ergot (JACOBS and CRAIG) 595

Allantoin: Excretion, insulin effect (LARSON and CHAIKOFF) 457

Amino acids: Heats of solution and dilution (ZITTLE and SCHMIDT) 161

Specific heat (ZITTLE and SCHMIDT) 161

Amino groups: Free, insulin (JENSEN and EVANS) 1

Amylase: Blood serum, determination (THOMPSON, TENNANT, and WIES) 85

Starch, viscosimetry (THOMPSON, TENNANT, and WIES) 85

Anemia: Hemoglobin, new formed (DAFT, ROBSCHEIT-ROBBINS, and WHIPPLE) 487

Protein catabolism (DAFT, ROBSCHEIT-ROBBINS, and WHIPPLE) 487

Anhydrostrophanthidins: (JACOBS and ELDERFIELD) 693

Arbacia punctulata: Egg, nucleic acid (BLANCHARD) 251

Ascorbic acid: Determination (TAUBER and KLEINER) 563

Avitaminosis: Enzyme efficiency (SURE, KIK, and BUCHANAN) 19, 27

B

Bases: Organic. *See* Organic bases

Bean: Soy, saponin (BURRELL and WALTER) 55

Bee-moth: Reducing substances, metamorphosis effect (CRESCITELLI and TAYLOR) 349

Benzyl group: Carbobenzoxy derivatives and benzylthio ethers, splitting (SIFFERD and DU VIGNEAUD) 753

Benzylthio ethers: Benzyl group splitting (SIFFERD and DU VIGNEAUD) 753

Beryllium: Rickets, "local factor" and viosterol, rôle (SOBEL, GOLDFARB, and KRAMER) 395

Blood: Intestinal juice loss, effect (HERRIN) 547

Bone: Extract, skeletal growth and bone phosphatase, effect (LANDAUER, UPHAM, and RUBIN) 121

Phosphatase, bone extract effect (LANDAUER, UPHAM, and RUBIN) 121

Bran: Crude fiber, feces fatty acids, volatile, influence (OLMSTED, CURTIS, and TIMM) 645

Pentosan, feces fatty acids, volatile, influence (OLMSTED, CURTIS, and TIMM) 645

Butyl alcohol: Extracts, cystine and cysteine determination (HESS and SULLIVAN) 195

C

Calcium: Body fluids, ionization (MCLEAN and HASTINGS) 285

Carbobenzoxy: Derivatives, benzyl group splitting (SIFFERD and DU VIGNEAUD) 753

Carbohydrate: Intermediates, glycogenic and ketolytic action, comparison (SHAPIRO) 373

Cardiac: *See* Heart

Carnosine: Synthesis (SIFFERD and DU VIGNEAUD) 753

Carotene: Leaves, properties (MACKINNEY) 45

Roots, properties (MACKINNEY) 45

Casein: Erepsin digestion, vitamin B deficiency influence (SURE, KIK, and BUCHANAN) 19

Trypsin digestion, vitamin B deficiency influence (SURE, KIK, and BUCHANAN) 19

Cellulose: Feces, determination (WILLIAMS and OLMSTED) 653

Cholesterol: Body fluids, pathological (BRUGER) 463

Heat-treated, provitamin D potency and properties, relation (HATHAWAY and KOCH) 773

-Protein complex, body fluids, pathological (BRUGER) 463

Creatinine: Blood (HAYMAN, JOHNSTON, and BENDER) 675

Crude fiber: Bran, feces fatty acids, volatile, influence (OLMSTED, CURTIS, and TIMM) 645

Feces, determination (WILLIAMS and OLMSTED) 653

Cysteine: Butyl alcohol extracts, determination (HESS and SULLIVAN) 195

Cystine: Butyl alcohol extracts, determination (HESS and SULLIVAN) 195

Pento-, availability (DYER and DU VIGNEAUD) 73

D

Deficiency disease: Growth, wheat germ oil effect (BLUMBERG) 227

Diabetes: Glucose excretion, exercise effect (CHAMBERS, HIMWICH, and KENNARD) 217
Skin lipids (MATTHEWS, NEWTON, and BLOOR) 145

E

Egg: Albumin, isoelectric point, apparent, ionic strength effect (SMITH) 187
Enzyme: Action (FALK and McGUIRE) 61
Alfalfa vitamin A destruction (HAUGE) 331
Avitaminosis (SURE, KIK, and BUCHANAN) 19, 27
Jejunal loop, transplanted (PIERCE, NASSET, and MURLIN) 239
See also Amylase, Erepsin, Esterase, Lipase, Phosphatase, Saccharase, Trypsin
Epinephrine: Blood, determination (WHITEHORN) 633
Erepsin: Casein digestion, vitamin B deficiency influence (SURE, KIK, and BUCHANAN) 19
Trypsin-, protein digestion, study technique (SURE, KIK, and BUCHANAN) 11
Ergosterol: Activated, chicken, action (BILLS, MASSENGALE, McDONALD, and WIRICK) 323
Crude, provitamin D (BILLS, MASSENGALE, McDONALD, and WIRICK) 323
Ergot: Alkaloids (JACOBS and CRAIG) 595
Ergotinine: Cleavage, sodium and butyl alcohol (JACOBS and CRAIG) 595
Esterase: Liver, specificity and inhibition (WEBER and KING) 131
Pancreas, vitamin B deficiency influence (SURE, KIK, and BUCHANAN) 27
Ethylphenylacetic acid: Hydrocarbons derived from (LEVENE and MARKER) 409
Exercise: Glucose excretion, diabetes, effect (CHAMBERS, HIMWICH, and KENNARD) 217

F

Fat: -Soluble ester glycerol, lymph, microdetermination (FREEMAN and FRIEDEMANN) 471
Vitamin B-sparing action (EVANS and LEPKOVSKY) 439
Fatty acids: Lard, and esters, nutritive value (LEPKOVSKY, OUER, and EVANS) 431
Volatile, feces, bran pentosan and crude fiber, influence (OLMSTED, CURTIS, and TIMM) 645
—, soluble, absorption (HUGHES and WIMMER) 141
Feces: Cellulose determination (WILLIAMS and OLMSTED) 653
Crude fiber, determination (WILLIAMS and OLMSTED) 653

Feces—*continued:*
Fatty acids, volatile, bran pentosan and crude fiber, influence (OLMSTED, CURTIS, and TIMM) 645
Hemicellulose, non-water-soluble, determination (WILLIAMS and OLMSTED) 653
Lignin, determination (WILLIAMS and OLMSTED) 653
Fibroin: Silk, hydrolysis products (GRANT and LEWIS) 667
Flavianates: Organic bases, identification (LANGLEY and ALBRECHT) 729
Flavin(s): Lacto-, growth effect (ITTER, ORENT, and MCCOLLUM) 579
—, preparation (ITTER, ORENT, and MCCOLLUM) 579
Vitamin B_2, non-identity (ELVEHJEM and KOEHN) 709
Food: Acid-base equilibrium determination (DAVIDSON and LECLERC) 337
Fullers' earth: Vitamin G concentration (LEPKOVSKY, POPPER, and EVANS) 257
Fungus: Lipase, activity (KIRSH) 421

G

Galacturonic acid: *d*-, derivatives (MORELL and LINK) 763
—, esterification and acylation (MORELL and LINK) 763
Determination, Bertrand's method (KERTESZ) 127
Galleria mellonella: *See* Beemoth
Glucose: Excretion, diabetes, exercise effect (CHAMBERS, HIMWICH, and KENNARD) 217
Glycogenic and ketolytic action, comparison (SHAPIRO) 373
Glucuronic acid: Determination, Bertrand's method (KERTESZ) 127
Glycerol: Ester, fat-soluble, lymph, microdetermination (FREEMAN and FRIEDEMANN) 471
Muscle extract, glycogen hydrolysis (CARRUTHERS and LEE) 525
Glycine: Proteins, determination (PATTON) 267
Glycogen: Glucose and carbohydrate intermediates, comparison (SHAPIRO) 373
Hydrolysis, liver extract (CARRUTHERS) 535
—, muscle extract (CARRUTHERS) 535
—, —, glycerol extract (CARRUTHERS and LEE) 525
Growth: Deficiency disease, wheat germ oil effect (BLUMBERG) 227
Homomethionine effect (DYER and DU VIGNEAUD) 73
Lactoflavin effect (ITTER, ORENT, and MCCOLLUM) 579
Pentocystine effect (DYER and DU VIGNEAUD) 73

H

Heart: Cardiac aglucones (JACOBS and ELDERFIELD) 497

Hemicelluloses: Non-water-soluble, feces, determination (WILLIAMS and OLMSTED) 653

Hemoglobin: New formed, anemia (DAFT, ROBSCHEIT-ROBBINS, and WHIPPLE) 487

Homomethionine: Availability (DYER and DU VIGNEAUD) 73

Hydrocarbons: Methylphenyl- and ethylphenylacetic acids, derived from (LEVENE and MARKER) 409

Hydrogen ion concentration: Intestine, small (ROBINSON) 403

I

Insulin: Allantoin excretion, effect (LARSON and CHAIKOFF) 457

Amino groups, free (JENSEN and EVANS) 1

Crystalline, phenylalanine isolation (JENSEN and EVANS) 1

—, proline isolation (JENSEN and EVANS) 1

Liver lipids, depancreatized dog, effect (KAPLAN and CHAIKOFF) 201

Intestine: Hydrogen ion concentration (ROBINSON) 403

Juice loss, blood effect (HERRIN) 547

— —, effect (HERRIN) 547

Secretions, composition (DE BEER, JOHNSTON, and WILSON) 113

See also Jejunum

Isoleucine: Metabolism (CARTER) 619

Phenyl derivatives, synthesis (CARTER) 619

J

Jejunum: Loop, transplanted, enzyme production (PIERCE, NASSET, and MURLIN) 239

K

Ketosis: Glucose and carbohydrate intermediates, comparison (SHAPIRO) 373

L

Lactoflavin: Growth effect (ITTER, ORENT, and MCCOLLUM) 579

Preparation (ITTER, ORENT, and MCCOLLUM) 579

Lard: Fatty acids and esters, nutritive value (LEPKOVSKY, OUER, and EVANS) 431

Leaf: Carotene, properties (MACKINNEY) 45

Leucine: Iso-, metabolism (CARTER) 619

—, phenyl derivatives, synthesis (CARTER) 619

Nor-, metabolism (CARTER) 619

—, phenyl derivatives, synthesis (CARTER) 619

Lignin: Feces, determination (WILLIAMS and OLMSTED) 653

Limulus polyphemus: Muscle, organic phosphates, distribution (ENGEL and CHAO) 389

Lipase: Fungus, activity (KIRSH) 421
Pancreas, specificity and inhibition (WEBER and KING) 131
—, vitamin B deficiency influence (SURE, KIK, and BUCHANAN) 27
Tissue, rickets (FALK and MCGUIRE) 61
Lipids: Liver, depancreatized dog, insulin effect (KAPLAN and CHAIKOFF) 201
Ovary, pregnancy, relation (BOYD) 607
Skin, diabetes (MATTHEWS, NEWTON, and BLOOR) 145
Liver: Esterase, specificity and inhibition (WEBER and KING) 131
Extract, glycogen hydrolysis (CARRUTHERS) 535
Lipids, depancreatized dog, insulin effect (KAPLAN and CHAIKOFF) 201
Lymph: Glycerol ester, fat-soluble, microdetermination (FREEMAN and FRIEDEMANN) 471

M

Magnesium: Calf, study (DUNCAN, HUFFMAN, and ROBINSON) 35
Mannose: *d*-, crystalline, preparation (LEVENE) 419
Metamorphosis: Bee-moth, reducing substances, effect (CRESCITELLI and TAYLOR) 349
Methionine: Homo-, availability (DYER and DU VIGNEAUD) 73
Methylphenylacetic acid: Hydrocarbons derived from (LEVENE and MARKER) 409
Milk: Tetany production, relation (DUNCAN, HUFFMAN, and ROBINSON) 35
Muscle: Extract, glycogen hydrolysis (CARRUTHERS) 535
Glycerol extract, glycogen hydrolysis (CARRUTHERS and LEE) 525
Limulus polyphemus, organic phosphates, distribution (ENGEL and CHAO) 389

N

Norleucine: Metabolism (CARTER) 619
Phenyl derivatives, synthesis (CARTER) 619
Nucleic acid: Egg, *Arbacia punctulata* (BLANCHARD) 251
Nucleotide: Adenine, blood (BUELL) 273

O

Oil: Wheat germ. *See* Wheat
Organic bases: Flavianates, identification (LANGLEY and ALBRECHT) 729
Ovary: Lipid, pregnancy, relation (BOYD) 607

P

Pancreas: Esterase, vitamin B deficiency influence (SURE, KIK, and BUCHANAN) 27
Lipase, specificity and inhibition (WEBER and KING) 131
—, vitamin B deficiency influence (SURE, KIK, and BUCHANAN) 27

Pancreatectomy: Liver lipids, insulin effect (KAPLAN and CHAIKOFF) 201
Parathyroid: Hormone, chemistry (TWEEDY, BELL, and VICENS-RIOS) 105
Parathyroid extract: Tissue effect (MORGAN and SAMISCH) 741
Pentocystine: Availability (DYER and DU VIGNEAUD) 73
Pentosan: Bran, feces fatty acids, volatile, influence (OLMSTED, CURTIS, and TIMM) 645
Phenylalanine: Insulin, crystalline, isolation (JENSEN and EVANS) 1
Phosphatase: Bone, bone extract effect (LANDAUER, UPHAM, and RUBIN) 121
Marine invertebrates (NORRIS and RAO) 783
Phosphates: Organic, *Limulus polyphemus* muscle, distribution (ENGEL and CHAO) 389
Phosphorus: Blood serum, partition, laying hens (ROEPKE and HUGHES) 79
Pituitary extract: Anterior, growth hormone, protein metabolism, effect (SCHAFFER and LEE) 355
Pregnancy: Ovary lipid, relation (BOYD) 607
Proline: Insulin, crystalline, isolation (JENSEN and EVANS) 1
Protein(s): Catabolism, anemia (DAFT, ROBSCHEIT-ROBBINS, and WHIPPLE) 487
Protein(s)—*continued:*
Cholesterol-, complex, body fluids, pathological (BRUGER) 463
Glycine determination (PATTON) 267
Metabolism, anterior pituitary growth hormone, effect (SCHAFFER and LEE) 355
Solutions, refractivity (HAND) 703
Tryptic-ereptic digestion, study technique (SURE, KIK, and BUCHANAN) 11
Provitamin: D, ergosterol, crude (BILLS, MASSENGALE, MCDONALD, and WIRICK) 323
—, potency and properties, heat-treated cholesterol (HATHAWAY and KOCH) 773

R

Reducing substances: Bee-moth, metamorphosis effect (CRESCITELLI and TAYLOR) 349
Urine, normal (LAUG and NASH) 479
Ribose: *d-*, crystalline, preparation (LEVENE) 419
Rickets: Beryllium, "local factor" and viosterol, rôle (SOBEL, GOLDFARB, and KRAMER) 395
Incurable (SOBEL, GOLDFARB, and KRAMER) 395
Tissue, lipase (FALK and MCGUIRE) 61
Root: Carotene, properties (MACKINNEY) 45

S

Saccharase: Determination (SUMNER and HOWELL) 51

Saponin: Soy bean (BURRELL and WALTER) 55
Silk: Fibroin, hydrolysis products (GRANT and LEWIS) 667
Skeletal growth: Bone extract effect (LANDAUER, UPHAM, and RUBIN) 121
Skin: Lipids, diabetes (MATTHEWS, NEWTON, and BLOOR) 145
Sodium: Blood cell, red, determination (OBERST) 153
Soy bean: *See* Bean
Starch: Amylase, viscosimetry (THOMPSON, TENNANT, and WIES) 85
Strophanthidins: Anhydro- (JACOBS and ELDERFIELD) 693
Strophanthin: (JACOBS and ELDERFIELD) 693
Sulfhydryl group: Vitamin B_2 deficiency, rôle (ITTER, ORENT, and MCCOLLUM) 585

T

Tetany: Milk-produced (DUNCAN, HUFFMAN, and ROBINSON) 35
Tissue: Parathyroid extract effect (MORGAN and SAMISCH) 741
Viosterol effect (MORGAN and SAMISCH) 741
Trypsin: Casein digestion, vitamin B deficiency influence (SURE, KIK, and BUCHANAN) 19
-Erepsin, protein digestion, study technique (SURE, KIK, and BUCHANAN) 11

U

Urine: Reducing substances, normal (LAUG and NASH) 479

V

Valine: Metabolism (CARTER) 619
Phenyl derivatives, synthesis (CARTER) 619
Viosterol: Rickets, beryllium, rôle (SOBEL, GOLDFARB, and KRAMER) 395
Tissue effect (MORGAN and SAMISCH) 741
Vitamin(s): A, alfalfa, destruction, enzymatic, curing process (HAUGE) 331
B deficiency, casein tryptic and ereptic digestion, influence (SURE, KIK, and BUCHANAN) 19
— —, pancreas lipase and esterase, influence (SURE, KIK, and BUCHANAN) 27
— extraction (ITTER, ORENT, and MCCOLLUM) 571
—, fat sparing action (EVANS and LEPKOVSKY) 439
— loss, rat tissue (EVANS and LEPKOVSKY) 439
B_2 deficiency, sulfhydryl group, rôle (ITTER, ORENT, and MCCOLLUM) 585
—, flavins, non-identity (ELVEHJEM and KOEHN) 709
—. *See also* Vitamin G
C determination (TAUBER and KLEINER) 563
—, tissues (TAUBER and KLEINER) 563

Vitamin(s)—*continued:*
E concentrates, preparation and properties (EVANS, MURPHY, ARCHIBALD, and CORNISH) 515
G concentration (LEPKOVSKY, POPPER, and EVANS) 257
—. *See also* Vitamin B_2
Pro-, D, ergosterol, crude (BILLS, MASSENGALE, MCDONALD, and WIRICK) 323
Vitamin(s)—*continued:*
Pro-, D, potency and properties, heat-treated cholesterol (HATHAWAY and KOCH) 773
See also Avitaminosis

W

Wheat: Germ oil, growth deficiency disease, effect (BLUMBERG) 227